Mental Health and Deafness in Scotland: Exploring the Data

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Foreword

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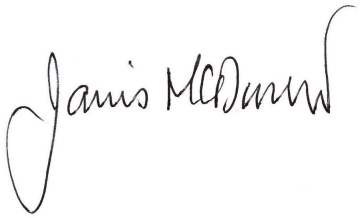
The contents of this report have never been more needed. The Covid-19 pandemic has raised issues of communication and highlighted it in a way that has never been known in my lifetime. It also raises issues of mental health and well-being as we move into the recovery and redesign phase of dealing with its aftermath. Scotland is moving strongly towards a rights-based, person-centred approach which can help us argue the case for change. To have any form of sensory loss that leads to sensory deprivation is a form of torture to the individual and communication has never been more critical to success.

We must use this opportunity to highlight the existing, baseline data related to the experiences of those affected across the spectrum of deafness and its four key pillars: Deaf; Deafened; Deafblind; and Hard of Hearing. The future is brewing a perfect storm: existing, higher than average problems with mental ill-health; an aging population adversely and disproportionately affected by deafness; and a legacy of coping with Covid-19. Dual sensory loss in older adults is a further issue that will have to be addressed sooner rather than later as a communication priority in Scotland.

This report gives real insight into the existing baseline. It can be followed up, the figures tracked over time. It can be used to anticipate needs in future service development and calculate the level and types of services needed. It can help plan and prepare the case for change. It can also be used to consider preventative and early intervention actions: we need to look further at preventable deafness, preventing social isolation and leveling the well-being and happiness playing field for those affected by deafness.



Janis McDonald
Chief Officer deafscotland

1 Introduction

There can be no doubt that the COVID-19 pandemic and subsequent lock downs have brought the topic of social isolation to the fore. The damaging affects of this social isolation have been a feature of much debate and concern as the pandemic has progressed, and the need to address these affects have been very apparent. Social isolation has a negative impact on mental health, this has been well documented. Social isolation, however, is not something that is new to those with hearing loss. While COVID-19 has raised awareness of the damaging affects it has, there has been a body of research accumulating on mental health and deafness for some years.

This report aims to add to this evidence base by examining the sources available, in an attempt to determine the prevalence of those with hearing loss and mental ill health issues in Scotland. Consideration will be given to the data sources currently available, sources found will be compared with wider research. From this process, robust estimates of current prevalence rates, and where possible, future projections for each Local Authority will be estimated. It is hoped that this report will go some way to giving Local Authorities an overview that will assist decision-makers to plan vital service provision now, and as society re-builds in the days after COVID.

2 Background

With input from Queen Margaret University, deafscotland have carried out a range of specific research studies aimed at highlighting, and going some way to plug, the current gaps in data on the numbers of people with hearing loss in Scotland. By addressing these gaps, it is hoped that the best possible estimates of numbers can be obtained, helping to assist with service provision across all four pillars of deafness. Both the ‘Deafness: The Census and Beyond’, and ‘Deafness and Dementia: Predicting the Future for Scotland’ reports have highlighted the need for accurate data collection so that services can be provided as required.

This report is the next in the series of this research and will look at the data relating to deafness and mental health that is currently available publicly. As with the previous studies, we will use additional sources to gauge how far this data matches the actual picture. Using the information from these additional sources, and combining it with population statistics obtained from the National Records of Scotland (NRS), we will provide detailed estimates for each of the 32 Local Authorities in Scotland. It is hoped that these estimates can be used for anticipatory planning and, if needed, service re-design to ensure accessibility and inclusion for all.

There can be little doubt that the isolation caused by Lockdowns imposed during the COVID-19 pandemic have impacted upon the mental health of society. Indeed, the Scottish Government report “Scotland’s Wellbeing: The Impact of COVID-19” states:

> “
>
> *social isolation experienced due to Lockdown measures has resulted in increased levels of loneliness leading to distress, depression and anxiety across the country. It is evident that there will be a greater number of people accessing mental health services in the coming months.*
>
> ”
>
> Scotland’s Wellbeing: The Impact of COVID-19

The above statement can be echoed across all of society. The diversity of the spectrum of deafness means that dedicated service provision, specific to the needs of individuals, is crucial. This can only be provided if detailed numbers of people with hearing loss and mental health issues in Scotland are obtained.

3 Literature Review

The link between social isolation, loneliness and general ill health has been well established and is outlined in, for example, the systematic review by Santini et al. (2015) which provides a good starting point for an overview of current research in the field. Here, research took the form of a study that reviewed "evidence on associations between social relationships and depression in the general population” (Santini et al. 2015). This relationship was further explored in a review carried out three years later where it was noted “that there is consistent evidence linking social isolation and loneliness to worse cardiovascular and mental health outcomes” (Leigh-Hunt et al. 2017).

Specific analysis of the link between hearing loss and social isolation can be found, for example, in the Barker et al. (2017) systematic review, where findings suggested that older adults with hearing loss may feel frustration due to the difficulties they have communicating. These difficulties, it was argued, can lead to withdrawal from social situations which, in turn results in in social isolation and resultant health problems (Barker et al. 2017).

There is a large body of research on social isolation and deafness which is focussed on age-related hearing loss. Research in this area has found new impetus due to investigations into the link between hearing loss and dementia, which was brought to the fore in 2011 by the Lin’s longitudinal studyLin et al. (2011). In this research, it was argued that hearing loss was independently associated with dementia (Lin et al. 2011). Furthermore, the research of Lin et al. (2013) became part of a growing argument that gave greater awareness of the significance of age-related hearing loss (for example,

Increasingly, evidence has suggested that perceived social isolation or loneliness can be a risk factor for mental ill health in later life (Ong et al. 2015). Moreover, Cudjoe et al. (2018) argue

that “social isolation is an important and potentially modifiable risk that affects a significant proportion of the older adult population” .

A recent systematic review, the aim of which was “to summarise the current state of the literature exploring the association between hearing loss and social isolation and/or loneliness” provides a thorough overview of the current research debate, finding “several potential mechanisms that could explain the observed association between hearing loss and social isolation and loneliness” (Shukla et al. 2020).

Extending the demographic further, an official Canadian Government health report ‘Hearing difficulties and feelings of social isolation among Canadians aged 45 or older’, provides a comprehensive analysis. The 2016 study involved an analysis of the 2008/2009 Canadian Community Health Survey: Healthy Aging which collected data from respondents age 45 and over. Interestingly here, this self reported information suggests variation. Results from the study report that social isolation was more common among the 45-59 group when compared to those over 60. In addition, women were more likely than men to be socially isolated (16% versus 12%). While it was found that more women were likely to be more isolated due to issues with hearing, they were less likely to report experiencing problems with hearing. (Ramage-Morin 2016).

It is essential, of course, to consider the diversity within the spectrum of deafness, and specific research work can be found which reflects the nuances of each pillar. For example, an Austrian research study found that “patients with deafblindness suffer to a high extent from mental disorders” going on to argue “it is of utmost importance to reduce the burden of this population and improve access to specialized services to diminish isolation, a major risk factor for this population” (Fellinger et al. 2017). Furthermore, a six year Longitudinal study on dual sensory loss found that there was “increased depression symptomatology over time, which was of greater severity than those with one a single sensory loss. It was argued, therefore, that “management and intervention should be tailored to the type of sensory loss” (Cosh et al. 2017) . These findings were upheld in Heine’s review, where analysis “suggested that there is a significant relationship between Dual Sensory Loss (DSL), and decreased mental health in those with DSL either displaying depressive symptoms or being at risk of developing depression” (Heine & Browning 2014).

Furthermore, in a review published in the ‘Lancet’ in 2012, Fellinger, while outlining studies available, considers why there seems to be fewer studies on the Deaf community in relation to mental health issues. Here it is argued, “Deaf communities are made up of individuals who prefer to use sign language and whose social interaction defines a distinctive culture...these communities are essential to their members; nevertheless, they are difficult for hearing individuals, including medical professionals, to access. This might be one reason why very few studies of prevalence rates of mental disorders have been done” (Fellinger et al. 2012).

An excellent resource containing feedback from members of the Deaf community about their experiences and perceptions of mental health can be found in the 2017 health services report published by the BDA (https://bda.org.uk/wp-content/uploads/2017/03/BDA_Report_on_Health_Services_Provision_to_BSL_Users_in_Scotland.pdf). This publication deals with a range of topics; from discussion on the stigma of mental illness within the community, to the

level of service provision and is a very useful piece of qualitative research.

Research into the mental health problems of people who are deafened can be found, for example in the studies of Hallam et al. where, in terms of mental health "results indicated the existence of sudden and progressive onset groups". Results here also found that profound hearing loss impacted to a greater extent than hearing loss that had been acquired over time (Hallam et al. 2006).

In terms of sudden hearing loss, research suggests that "patients who developed continuous tinnitus had a higher rate of greater emotional distress than those without tinnitus", arguing that, "further research on the consequences of different risk factors specific to sudden hearing loss, their impact on psychological well-being, and the development of better treatment strategies is needed" (Chen et al. 2013).

Literature reflects the realisation of a need for nuanced service provision which covers the diverse aspect of deafness. Norwegian research, for example, looked at deaf patients who attended specialised mental health clinics. This study compared Deaf patients who used Norwegian Sign Language (NSL) with Hard of Hearing patients who needed other forms of assistance and found:

"When assessing and treating patients who use sign language, professionals are commonly aware and considerate of the need to secure mutual language and good communication. However, the need for special knowledge is more likely to be overlooked when interacting with patients using spoken language". Findings concluded that there were "clinical and demographic differences between patients using NSL and those speaking Norwegian. Medical comorbidity was significantly more prevalent in hard of hearing patients speaking Norwegian, and they tended to be more socially isolated and stressed" (Kvam et al. 2006).

A similar study in the UK which explored the communication preferences of deaf people when visiting hospital found that: "hospital communication preferences for most people with deafness could be met by increasing deaf awareness training for health professionals, a greater provision of specialized sign language interpreters and of health professionals who can use fluent sign language directly with clients in areas where contact with deaf people is frequent" (Middleton et al. 2010). It is interesting to note when contrasting these two studies that, in effect, the case that Kvam et al make is demonstrated in the Middleton et al. work. The emphasis is placed on providing adequate sign language interpreters in the latter study. While the need for deaf awareness training is suggested, there is no nuanced detail on how best to communicate with deaf patients who do not use sign language.

Service provision specifically for deaf children can be found in research carried out by Beresford et al which, looking at specialised services in England concluded: "Deaf children require services which are expert in deafness and mental health, and the findings suggest the specialist services are achieving this. Resolving issues of access and widening its remit are desirable ways forward in any future development of the service" (Beresford et al. 2010).

Continuing with the important theme of deafness in children, the National Deaf Children's Society (NDCS) have published a very comprehensive literature review on the emotional wellbeing of deaf children. It is a unique and nuanced work and provides excellent background

literature that can be consulted in relation to children and young people. This valuable is divided into two parts, “the first section focuses on emotional wellbeing in deaf children and young people, while the second section focuses on emotional wellbeing in parents of deaf children and young people”.
https://www.ndcs.org.uk/media/6198/emotional_wellbeing_literature_review_2020.pdf

In summary, the literature review is, of course, not an exhaustive list on the topic of mental health and deafness, rather it has been compiled with the purpose of giving as much of an overview on the topic as possible. It is hoped that in, reading this, it becomes clear why the contents of this report are needed.

4 The Four Pillars of Deafness

To ensure that the whole spectrum of deafness is included and to emphasise the diversity required in terms of the range of services needed for those with hearing loss in Scotland, this report will adhere to the ‘Four Pillars of Deafness’ model. This model underpins the work of deafscotland and each of these ‘pillars’ will now be discussed in turn.

4.1 People who are Deaf

People who identify as being Deaf would have been born deaf or became deaf in early childhood, as a consequence British Sign Language (BSL) is their first language. To a greater extent than any of the other categories of deafness, Deaf, BSL users normally identify with a unique Deaf Culture. For the first time in its’ history, the 2011 Census included questions directly related to BSL. In the 2011 Census respondents were asked if they used BSL at home. This is the first time such a question has been asked and therefore the first time statistics on BSL usage can be gained from the Census. Some 12,533 respondents answered that they used BSL at home.

It should be noted, however, that there is ambiguity in terms of the Census question as it cannot be assumed that all respondents who ticked ‘yes’ to using BSL at home were in fact Deaf. It has been argued that it is most probable that the figure ‘includes people who are not themselves deaf but live with someone who uses BSL as their first language’. The BDA estimate that at the present time this figure is likely to be in the region of 7,000.

Following a consultation process, The National Records of Scotland has addressed this ambiguity and recognises the need for additional Census questions relating to BSL. In the report ‘Plans for Scotland’s Census 2021’ it is stated that "for 2021, a need for information on use of British Sign Language (BSL), in addition to use ’at home’ has been highlighted for policy development and monitoring and legislative work, specifically for monitoring under the BSL(Scotland) Act 2015. The COVID-19 pandemic restrictions has resulted in the next Census being re-scheduled to 2022. To meet user need in 2022, a new question on British Sign Language use is proposed". It is likely, then, that the question(s) relating to BSL usage

will provide more nuanced data and a truer reflection of BSL users in Scotland which, in turn, should allow a better and more specific service provision.

In relation to mental health, while it is estimated that approximately 40% of deaf people will experience some mental health problems at some point in life (Hindley et al, 1994), it is argued by the BDA that this figure could be as high as 70% for those who are Deaf. “It has traditionally been very difficult to obtain data about the level of need in this area”. https://bda.org.uk/wp-content/uploads/2017/03/BDA_Report_on_Health_Services_Provision_to_BSL_Users_in_Scotland.pdf

4.2 People who are Deafblind

The recent Deafblind Scotland Toolkit states:

"Currently within Scotland there is no consensus on a clinical definition of deafblindness. In the absence of this a commonly adopted, helpful definition is that deafblindness is:

The loss of functioning in one sense [that] cannot be compensated for with the other sense, resulting in a distinct disability".

https://dbscotland.org.uk

THERE ARE VARIOUS TYPES OF DEAFBLINDNESS, ALSO TERMED DUAL SENSORY LOSS :

- Congenital, which is a term used to describe: children who born with hearing loss and sight loss or acquire these two conditions prior to language development.
- Acquired, people in this category are either: born deaf and experience sight loss later; born blind who become deaf later in life;or it could apply to those who have lost their sight and hearing later in life.
- Usher’s Syndrome
- CHARGE

At present the Census does not include any questions which allow respondents to identify with this category of deafness and as such no adequate census data can be gathered for this group.

The Centre for Disability Research at Lancaster University published a study relating to estimated deafblindness figures in the UK. This comprehensive study provides upper and lower estimates for deafblindness in the UK (Robertson & Emerson 2010). Bezuijen (2016) applied this research to population projections and produced upper and lower estimates for Scotland over time. Estimates of the number of deafblind people in Scotland in 2024 range from 15,000 (lower estimate) to 38,000 (upper estimate), growing to an estimated 23,000

(lower estimate) to 52,000 (upper estimate) by 2039. The majority here (for both lower and upper estimates) are over the age of 60 and thus follow a similar pattern to general age-related deafness.

Bodsworth et al. (2011) estimate the number of deafblind people with mental health problems is likely to be in the region of 61%. It has been possible to apply this figure to the estimates given by Bezuijen to give an estimate for the number of deafblind people in Scotland with mental health issues and these figures are presented in and table 2.

4.3 People who are Deafened

People who are deafened are those who become deaf after learning to speak. Deafness here can be the result of an accident or trauma or might be a side-effect of an illness. People in this category can lose their hearing suddenly or over time and are sometimes described as having Acquired Profound Hearing Loss (APHL).

At present the Census does not include any questions that would apply to people with this type of deafness. While some deafened people may well have identified with, and responded to the general question relating to, hearing loss as a long term health condition, at present there is no way of separating them from the larger cohort. As such, using available sources alone, it not possible to obtain reliable figures for this group. deafscotland statistics estimate 57,000 people in this category of deafness but this is likely to be greatly below the true figure. The nature of losing hearing suddenly is a traumatic experience and, as such, it would be reasonable to assume that people within this pillar of deafness may be additionally at risk of mental health problems. A data gathering policy is essential in order to ensure service provision is being met for this group of people.

4.4 People who are Hard of Hearing

The term ‘Hard of Hearing’ is used to describe those whose hearing loss is mild to moderate. In general terms those who are hard of hearing lose their hearing gradually over time. The category includes those with age-related hearing loss and as such, in terms of numbers, it is the largest of all 4 Pillars of Deafness.

At present the Census does not include any questions that would directly capture people with this type of deafness. While those with this type of deafness may well have identified with and responded to the general question relating to hearing loss as a long term health condition, there is no way of separating them from the larger cohort. As such it not possible to obtain detailed figures for this group.

However, by applying the Davis model to 2014 population figures it has been estimated that approximately 534,500 people may have been included in this category of deafness at the time of the 2011 Census (Davis 1995, Bezuijen 2016). It is likely that the figure for the number of hard of hearing people will be in the region of 600,000 at present.

4.5 Young people (under the age of 18)

While, of course, each of the pillars of deafness discussed above include individuals under the age of 18, it is essential to consider the age group separately.

The Consortium for Research in Deaf Education (CRIDE) produce annual reports which provide collated statistics on deaf children in the UK. These statistics are broken down into

regions and as such Scotland has a dedicated report. The most recent report for Scotland is from 2019, the 2020 figures are not available as yet. The report reminds us of the limitations found in all aspects of data available in terms of deafness, stating that 'coming up with a clear answer to the question of how many deaf children there are is not straightforward and figures need to be used with caution'.

https://www.ndcs.org.uk/media/6039/cride-2019-scotland-report-final.pdf

While the data contained within the report is wide ranging and useful, as with data collection generally, there are limitations and omissions and it is not as robust as it could be. It is clear that CRIDE must have been aware of this as, in the 2019 report for the first time, they asked services who responded 'if there were any known issues or gaps in the data they provided'. A total of 13 from 30 services (43%) stated that there were issues.

KNOWN ISSUES OR GAPS IN THE DATA PROVIDED

The problems identified in providing data are:

- databases not being able to separate out children with temporary hearing losses
- services not having data on children living in the area but educated outside of the area
- services only having data on children receiving support from the service
- services only having data on children referred from audiology or ENT
- services only having data for children who wear hearing aids
- service data not reflecting all deaf children who are seen by audiology.

It is estimated that there are in the region of 3,647 deaf children in Scotland. Adjusting for 'unknown' in terms of severity of hearing loss, the breakdown is as follows:

LANGUAGE USED BY YOUNG DEAF PEOPLE (UNDER THE AGE OF 18)

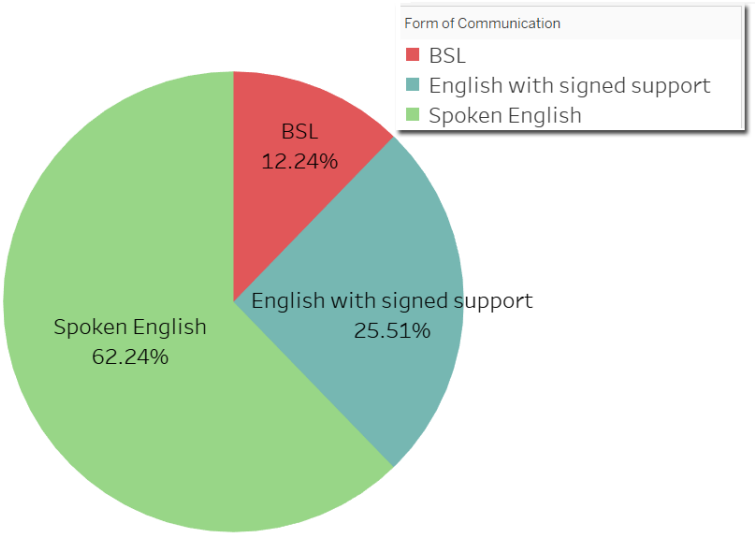
- 476 (61%) mainly communicate using spoken English.
- 195 (25%) use spoken English together with signed support.
- 94 (12%) use British Sign Language.

This is also pictured in figure 1,

A breakdown of numbers of young deaf people under the age of 18 for each of the Local Authorities is attached in table 3.

The numbers for severity of hearing loss can be found in table 1 and figure 2 and the estimated

Figure 1: How young deaf people communicate (under the age of 18)



number of Deaf students that are BSL users with mental health issues is displayed in figure 4, The number of young people per region can be found in figure 3.

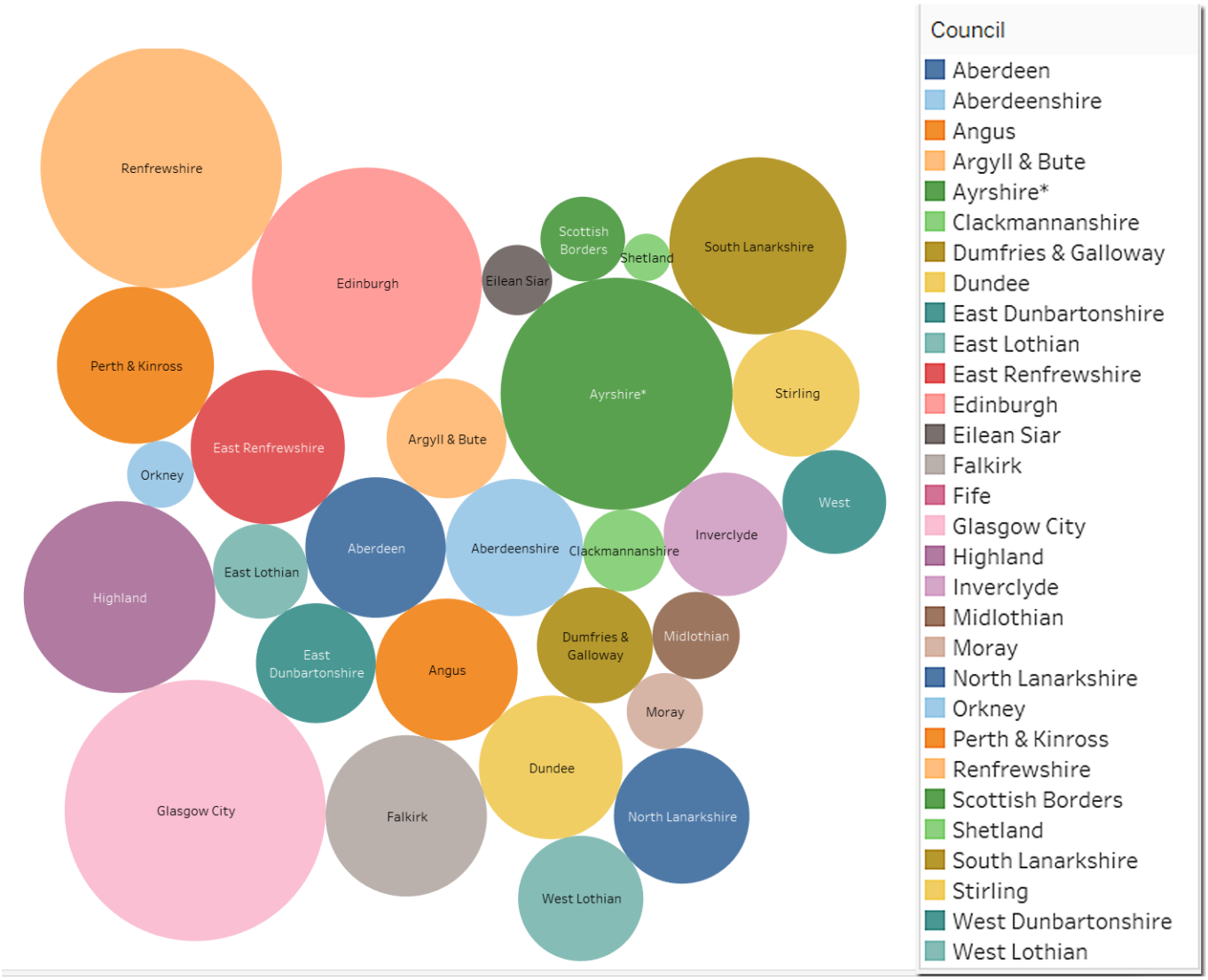
Table 1: Severity of hearing loss young people (under the age of 18)

Level of Hearing Loss	#	%
Unilateral	587	18%
Mild	918	28%
Moderate	991	30%
Severe	**328**	**10%**
Profound	**452**	**14%**
Total (excluding 'not known')	3276	100

At present there is no dedicated mental health provision for deaf children in Scotland. The National Deaf Childrens Society (NDCS) is campaigning to highlight the issue of mental health among deaf children. A research steering group has been established with the purpose of gathering the evidence base needed to highlight this gap in provision, and the concept of a dedicated service has been accepted by the NHS Scotland National Services Division.

Figure 2: Severity of hearing loss young people (under the age of 18) Source:CRIDE 2019

Figure 3: Approx number of children (under the age of 18) with mental health issues per council (*Ayrshire Councils presented as one region)



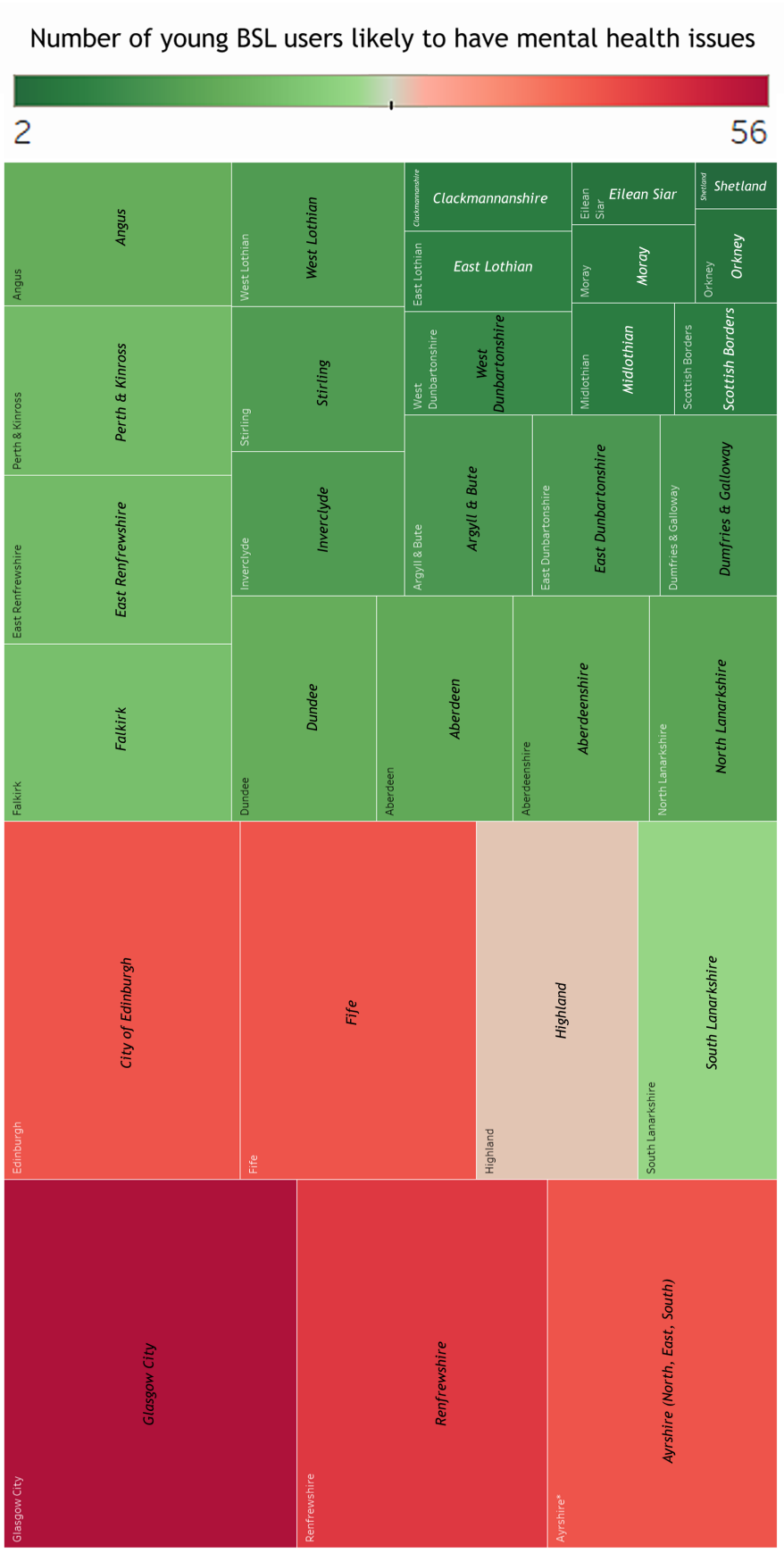


Figure 4: Number of young BSL users likely to have mental health issues by councils

5 Procedure

As has been stated, analysis of sources and publications relating to mental health and deafness has highlighted the need to provide detail specific to Scotland. The main aim of this project, therefore, has been to attempt to establish prevalence figures for the number of people in Scotland who are deaf and also have mental health issues.

The first port of call in terms of gathering numbers might have been instinctively to ask what information is available at GP level. This was, indeed the case in our earlier research on prevalence figures for dementia. It had been suggested that it might be possible to gain an overview of GP data by making a research request to the new Scottish Primary Care Information Resource (SPIRE). Launched in May 2017:

> “
>
> *the aim of SPIRE is to provide a single national system to extract data from General Practice clinical IT systems in Scotland. SPIRE will analyse and report on the data extracted for specific and approved purposes whilst ensuring the highest standards of patient confidentiality and privacy are maintained. However, it is not a national database - researchers will be able to request tailored extracts of data which, once approved, can be linked to other datasets for specific studies*
>
> ”
>
> https://understandingpatientdata.org.uk/news/guest-blog-new-scottish-spire-campaign

It is evident that SPIRE has the potential to become an immensely useful data resource, however, at present it does not hold any information on hearing loss figures because hearing loss numbers are not collected at GP level. Hopefully in the future this process will change and information on hearing loss can be fed into this potentially valuable resource.

5.1 Prevalence rates for those with mental health

To give some idea of the disparity in terms of official figures, the 2011 Census for Scotland, the source that ‘is used by central and local government, health authorities and many other organisations to allocate resources and plan services for everyone’ (National Records of Scotland) reported that in 2011:

A total of **350,492** individuals identified as having deafness or partial hearing loss, and of his figure **23,333**, or 6.7% of those who list long term health condition deaf or partial hearing indicated that they also had a mental health condition.

It is estimated that 40% of those with hearing loss experience mental health problems (Hindley et al. 1994). As has been explained this percentage is subject to variation and is an estimation in all pillars of deafness, but at a reported figure of 6.7%, the official Census figure is worryingly below the minimum threshold, and extremely inaccurate as a measure in this case.

Outlined in earlier deafscotland reports, and highlighted again here Section 4, the problematic nature of gaining comprehensive numbers for the prevalence of hearing loss is widely known, this applies also to those with hearing loss and mental health issues.

It is possible, using established modeling strategies, to obtain robust prevalence estimates and projections for the 'Hard of Hearing' pillar of deafness. While it is not possible at present to apply the same strategy to the other pillars, it is hoped that, as time progresses and data is collected it, will be possible to carry out a similar procedure for all pillars. For now, in order to give as accurate a picture of numbers as possible for the largest 'Hard of Hearing' pillar of deafness, the Davis model will be used. Adrian Davis' comprehensive study on the prevalence of deafness in the UK population is still the bench mark for statistics in this field (Davis 1995). The criteria Davis set out in his study was a loss of hearing of 35dB minimum in the better ear of respondents. He argued that this was the level that would require intervention of some kind (hearing aid etc) and thus was a good measure for hearing loss. Davis established percentages of prevalence for pre-defined age groups. This work was refined in 2014, by Akeroyd et al. (2014).

In the 2016 report, 'Deafness in Scotland' (Bezuijen 2016), Jeanine Bezuijen took these prevalence rates and applied them to the National Records of Scotland (National Records of Scotland 2020) population projections for Scotland until 2039. From this amalgamation, it was possible to project the prevalence rates for Scotland over time for each age group. Using Davis (1995)' original age groups and including the category of 'over 80' (with prevalence of 81%) Bezuijen was able to project general hearing loss prevalence rates for Scotland up to 2039. This methodology has been applied and expanded upon within this report to project prevalence rates for Local Authorities. It has, therefore, been possible to obtain robust estimates and future projections for the 'hard of hearing' pillar of deafness.

6 The Impact of COVID-19

> "
>
> *Social isolation does not pertain to those who have voluntarily disconnected, rather, socially isolated people have an unmet need for meaningful interactions*
>
> "
>
> Ramage-Morin (2016)

The unprecedented measures that have been put in place due to the COVID-19 pandemic have been a great challenge for society at large. 'Social Isolation' is a term that has made its way into the general vocabulary, it has become a very real and tangible experience for many, no longer just a theoretical concept. The implementation of social distancing, compulsory use of face-masks, and the move to digital communication have been changes that have been problematic for society as a whole (Smith & Lim 2020). The impact these changes have had on deaf people cannot be underestimated.

Acknowledging that the introduction of face coverings and protection are difficult for society as a whole, Chodosh et al argue that 'masking is challenging for everyone, but it is especially difficult for people with hearing loss. Masks also create enormous challenges for members of the Deaf community who use sign language, clinicians with hearing loss, and other populations (Chodosh et al. 2020).

There has been a flurry of attempts to investigate the extent to which this impact has been felt and from this, no doubt, a rich base of both quantitative and qualitative has been and will be found.

For example, the results from a recent survey confirm:

> "
>
> *the effects of the pandemic appear to have a greater negative impact on depression, loneliness and cognitive function the worse their hearing is. This may be due to increased levels of loneliness brought on by the enforced social distancing...although we hope the social distancing measures to be temporary, they have been ongoing for many months, and many elements including the use of face-coverings and limited group meetings may remain for a longer period of time. The impact that this prolonged period has in the long term will be monitored, and to this end data collection is ongoing for this purpose.*
>
> "
>
> Littlejohn et al. (2021)

Studies have also focussed on how users of hearing technology have fared during the pandemic. It has been possible to identify and explore some of the obstacles users of this technology have faced (Alqudah et al. 2021).

As the pandemic has progressed, a number of organisations have been collecting information from service users and members.

For example, deafscotland have carried out three COVID-19 surveys which have collected a wealth of experiential information on how those with hearing loss have coped during the pandemic. It has been reported that:

> “
>
> *people affected by deafness have continually found themselves more isolated and left out of society due to the Covid -19 pandemic. (M. Reid)*
>
> ”
>
> https://deafscotland.org/news/third-covid-19-report

The need for information to be given in a suitable and inclusive way can be illustrated by a survey from ‘Voices from Scotland’ report that:

> “
>
> *Most offers of help and support were through telephone helplines, excluding the deaf population who were left unable to contact people for help and support – feedback locally and nationally, the same message, that they felt even more cut off from their communities.*
>
> ”
>
> https://data.gov.scot/coronavirus-covid-19/detail.html#2_indirect_health_impacts

A report on shielding during the pandemic carried out by Inclusion Scotland states:

> “
>
> *Pre-pandemic, disabled people were more likely to experience isolation and loneliness than others and for some, social contact has reduced even further. (Inclusion Scotland) Glasgow Disability Alliance research during lockdown found eight in 10 respondents worried about isolation and nine in 10 worried about their physical or mental health. Many also reported barriers to accessing mental health support.*
>
> ”
>
> https://inclusionscotland.org/shielding-report/

Furthermore, a Glasgow Disability Alliance (GDA) survey of its members has found that during lockdown 8 out of 10 respondents worried about isolation and nine in 10 worried about their physical or mental health. Many also reported barriers to accessing mental health support.

https://gda.scot/app/uploads/2020/09/GDAa__Supercharged-Covid-19Report.pdf

In terms of a direct link to mental health services, the “Scotland’s Wellbeing: The Impact of COVID-19’ report confirms that

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> *Mental Health services have been impacted with a fall in referrals to CAMHS, as well as a fall in the number of adults starting psychological therapy’. In addition ‘studies suggest that the pandemic has had an overall negative effect on mental health, suggesting increasing levels of loneliness, levels of distress, depression and anxiety.*
>
> ”
>
> https://nationalperformance.gov.scot/sites/default/files/documents/NPF_Scotland%27s_Wellbeing_May2019.pdf

There can be no doubt that surveys and other qualitative attempts to glean as much experiential information as possible, not only on how the pandemic has affected society generally, but those with hearing loss specifically, will continue. It is vital that future strategies are informed by lived experience data that is in abundance just now. It is a unique chance for service users to inform service provision and create resources that suit their wants and needs.

> “
>
> *In general, people now seem delighted to say that there is light at the end of the tunnel and that things will be returning to normal in the not too distant future. Whilst that is indeed laudable, things will not really alter for some of us with varying degrees of hearing impairment. I am fortunate that my hearing loss is mild, just now, but for those with acute loss the world around about them will not alter significantly with regard to their hearing. We need to understand this and take care of one another.*
>
> ”
>
> taken from: Living through a pandemic with hearing loss"; (Mowat et al. 2020)

7 Prevalence figures and Future Projections

Where the data is available, Section 4 includes estimates of prevalence numbers available for each of the four pillars of deafness. It has been possible to obtain the 2019 prevalence

rates for deaf children with reference to CRIDE statistics. Figures have been tabulated and estimates for the number of deaf children with mental health issues are noted (see table 3).

7.1 Future Projection

While lack of robust data has meant that it is not possible to include future projection for three of the four categories at this time, by applying the Davis model, however, it has been possible to estimate prevalence numbers for the hard of hearing category of deafness. In this instance, once obtained, prevalence rates were projected. These projections were accomplished by applying 2019-based populations predictions from the National Records Office to the prevalence rates for those with hearing loss and mental health issues and hearing loss were obtained. Once the prevalence rates for the combined conditions of were estimated, they will be projected over a 20 year period in order to establish the overall trend for all 32 Councils in Scotland.

In terms of the other pillars of deafness, while it has not been possible to apply detailed statistical modelling that would all robust future projection as yet, it has been possible to give a robust indication of numbers.

As has been previously stated, there is at present no detailed breakdown for those who are Deaf in Scotland. The BDA states that, overall, there are 7000 BSL users in Scotland. It has not been possible to break this down into Local Authority areas as it would be 'guess work' rather than robust statistical estimates. It is hoped that with more nuanced questioning in the next Census a detailed breakdown will be available.

It has, however, been possible to provide numbers for young people under the age of 18. CRIDE statistics are broken down into Local Authority areas and case load numbers are noted. While, as has been pointed out, there are still imperfections in the data at present, the figures give a good indication of numbers.

Furthermore, thanks to the work of (Bezuijen 2016) and (Bodsworth et al. 2011) it has been possible to estimate the numbers of deafblind people in Scotland with who are likely to have mental health problems. (see table 2).

Unfortunately, it has not been possible to obtain detail on the number of deafened people in Scotland. While, as has been discussed, there is a rough general estimate of 57,000 people in this category, and it is fair to assume that a proportion of people in the 'Hard of Hearing' category may reflect numbers of those who have been deafened, it is not possible at this point in time to even vaguely estimate numbers for this pillar. It is vital that data collection focusses on identifying deafened people. As with all of the four pillars, people within this category should be given the service provision they need. This cannot be done without knowing how many people need specific services. In terms of equity, data gathering here is a matter of priority.

8 Conclusion

> “
>
> *we should not wait for the pandemic to be over to learn lessons and begin to plan a way forward towards social renewal.*
>
> ”
>
> If Not Now, When?, The Social Renewal Advisory Report

As with the other two reports in this series, it has been demonstrated that it is essential that data collection in this area has to be further developed. It is vital that data is collected, shared and available centrally to ensure that service provision can be optimum. It is essential to ‘join up the data dots’ to enable figures to be obtained at the touch of a button rather than by having to construct statistical models. It is clear that the Census does not provide robust information on the number of deaf people in Scotland in its present format. Although this will be addressed in terms of BSL in the next Census, the format will still not capture the data required for the other pillars. More nuanced questions could result in the Census being a central information point. At present it is not a true reflection of the numbers of people with hearing loss generally and mental health issues additionally.

In May 2011, the Scottish Mental Health Service for Deaf People was launched. Hosted by NHS Lothian it is responsible for a Scotland-wide service delivery and its establishment is recognition of the need for specialist services. This recognition is, of course, a step in the right direction, but there is as yet no dedicated Children’s Mental Health Service in Scotland.

While there is evidence of good practice, generally, there is a lack of central data collection at GP level. It is apparent that this lack of data collection is a wasted opportunity, especially now when linking in to the SPIRE database can provide robust data which could benefit statistical analysis and be used to help targeted service provision.

During the COVID-19 pandemic measures put in place to protect wider society caused distress to those with hearing loss. From masks which made it impossible to lip read; the 2 metre rule for social distancing rendering hearing aids useless or the loneliness and isolation caused by shielding. All measures made communication impossible, resulting in exclusion and isolation. This report has demonstrated the link between social isolation and mental health has been proven. Social isolation is a daily occurrence for those who are deaf. The pandemic has given society a unique chance to experience and relate to this isolation as never before. It is vital to capitalise on this unique insight and use it to break down the barriers so often encountered in the deaf world. These barriers to inclusion are out in the open now and they are hard for society at large to ignore. It is vital that data is collected and shared so that service provision can reflect the numbers who need it.

People within each of the pillars of deafness have specific needs, and services must reflect this. Alongside this, it is also worth noting that there will be variation of need within the the

pillars. Gender, age and cultural issues all have to be taken into account when dealing with the provision of services, but under-pining all of this is the need for targeted data gathering.

Quite simply, how can services be adequately provided if the numbers of potential service users are not known? It is hoped that this report, together with the other two in the series can go some way to provide numbers that will help plan service provision and raise awareness of the need to plug the gaps if service provision is to be tailored for those who need it, where they need it.

1 Appendix

Table 2: Projected incidence of deafblindness (upper estimate) in Scotland over time by age. Numbers have been rounded to nearest 100 after (Bezuijen 2016) and multiplied by 0.61 (Bodsworth et al. 2011), the expected incidence of mental health issues in deafblind people.

Age Group	Year					
	2014	**2019**	**2024**	**2029**	**2034**	**2039**
0-9	610	610	610	610	610	610
10-19	305	305	305	305	305	305
20-29	305	305	305	305	305	305
30-39	305	305	305	305	305	305
40-49	610	610	610	610	915	915
50-59	1830	1830	1830	1525	1525	1830
60-69	3355	3355	3660	3660	3660	3355
70-79	3355	3660	3965	4270	4880	5185
80-89	5490	6100	6710	7930	8845	**9760**
90+	3050	3660	4575	5490	7015	9150

Table 3: Services were asked to provide figures for the number of deaf children as of 31 January 2019. In bold were the number of people in the area covered by the service include all caseload. (*) where caseload of the service is higher than the children in the service. The assumption is here that children of other areas have been on the caseload of another council.

	Number of permanently deaf children living in the geographical area covered by the service	Number of permanently deaf children on the caseload of the service	Estimated Number of children with mental health issues	Number of young BSL users likely to have mental health issues
Aberdeen	110	99	44	16
Aberdeenshire	106	106	42	16
Angus	112	112	45	17
Argyll & Bute	81	81	32	12
Clackmannanshire	37	44	15	6
Dumfries & Galloway	75	75	30	11
Dundee	95	116	46	17
Ayrshire*	299	299	120	44
East Dunbartonshire	80	80	32	12
East Lothian	49	51	20	7
East Renfrewshire	71	132	53	20
Edinburgh	295	146	118	44
Eilean Siar	28	28	11	4
Falkirk	102	145	58	21
Fife	298	298	119	44
Glasgow City	380	205	152	56
Highland	205	131	82	30
Inverclyde	85	5	34	13
Midlothian	43	42	17	6
Moray	32	31	13	5
North Lanarkshire	99	102	41	15
Orkney	12	26	10	4
Perth & Kinross	138	138	55	20
Renfrewshire	324	324	130	48
Scottish Borders	39	40	16	6
Shetland	8	13	5	2
South Lanarkshire	169	174	70	26
Stirling	86	91	36	13
West Dunbartonshire	61	61	24	9
West Lothian	88	88	35	13

1.1 Aberdeen City

There are an estimated 8164 people with hearing loss and mental health issues in Aberdeen City today see (table 4). This will rise to 10,458 in 2038 (see table 6) if no interventions to address the issue are undertaken. 6,520 ($\approx$ 80%) of these are in the above 61 of age category in 2021 and 8,686 ($\approx$ 83%) in 2038.

Table 4: Estimate of people with hearing loss and mental health problems in Aberdeen City 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	11	132	247	599	878	1061	1003	
female	67	84	202	302	590	1233	1755	Aberdeen City
all	78	216	449	901	1468	2294	2758	

Table 5: Estimate of people with hearing loss and mental health problems in Aberdeen City 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	9	150	282	556	628	1369	1235	
female	58	91	230	269	660	1412	1910	Aberdeen City
all	67	241	512	825	1288	2781	3145	

Table 6: Estimate of people with hearing loss and mental health problems in Aberdeen City 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	10	125	322	629	868	1510	1746	
female	61	75	248	302	592	1616	2354	Aberdeen City
all	71	200	570	931	1460	3126	4100	

1.2 Aberdeenshire

There are an estimated 10,911 people with hearing loss and mental health issues in Aberdeenshire today see (table 7). This will rise to 15,607 in 2038 (see table 9) if no interventions to address the issue are undertaken. 8,807 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 13,448 ($\approx$ 86%) in 2038.

Table 7: Estimate of people with hearing loss and mental health problems in Aberdeenshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	8	114	324	830	1248	1648	1365	
female	41	85	284	418	853	1697	1996	Aberdeenshire
all	49	199	608	1248	2101	3345	3361	

Table 8: Estimate of people with hearing loss and mental health problems in Aberdeenshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	7	129	332	788	929	2087	2067	
female	38	92	292	398	961	2111	2695	Aberdeenshire
all	45	221	624	1186	1890	4198	4762	

Table 9: Estimate of people with hearing loss and mental health problems in Aberdeenshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	8	114	374	815	1309	2383	2865	
female	41	79	316	412	910	2431	3550	Aberdeenshire
all	49	193	690	1227	2219	4814	6415	

1.3 Angus

There are an estimated 5,825 people with hearing loss and mental health issues in Angus today see (table 10). This will rise to 7,769 in 2038 (see table 12) if no interventions to address the issue are undertaken. 4,930 ($\approx$ 85%) of these are in the above 61 of age category in 2021 and 6,960 ($\approx$ 90%) in 2038.

Table 10: Estimate of people with hearing loss and mental health issues n Angus 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	43	124	371	602	885	800	
female	18	32	114	190	428	957	1258	Angus
all	21	75	238	561	1030	1842	2058	

Table 11: people with hearing loss and mental health issues in Angus 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	48	121	315	449	1070	1143	
female	16	34	108	164	473	1094	1601	Angus
all	19	82	229	479	922	2164	2744	

Table 12: Estimate of people with hearing loss and mental health problems in Angus 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	42	136	311	573	1225	1522	
female	17	29	114	157	411	1238	1991	Angus
all	20	71	250	468	984	2463	3513	

1.4 Argyll and Bute

There are an estimated 4,610 of people with hearing loss and mental health issues in Argyll and Bute today see (table 13). This will rise to 5,794 in 2038 (see table 15) if no interventions to address the issue are undertaken. 3,939 ($\approx$ 85%) of these are in the above 61 of age category in 2021 and 5,273 ($\approx$ 0.91%) in 2038.

Table 13: Estimate of people with hearing loss and mental health problems in Argyll and Bute 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	28	91	285	497	752	576	
female	12	20	81	151	347	790	977	Argyll and Bute
all	15	48	172	436	844	1542	1553	

Table 14: Estimate of people with hearing loss and mental health problems in Argyll and Bute 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	35	78	234	369	861	845	
female	10	19	66	123	380	851	1239	Argyll and Bute
all	12	54	144	357	749	1712	2084	

Table 15: Estimate of people with hearing loss and mental health problems in Argyll and Bute 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	26	92	206	461	982	1085	
female	9	16	67	103	316	959	1470	Argyll and Bute
all	11	42	159	309	777	1941	2555	

1.5 City of Edinburgh

There are an estimated 18,168 of people with hearing loss and mental health issues in the City of Edinburgh today (see table 16). This will rise to 26,021 in 2038 (see table 18) if no interventions to address the issue are undertaken. 14492 ($\approx$ 80%) of these are in the above 61 of age category in 2021 and 21767 ($\approx$ 0.84%) in 2038.

Table 16: Estimate of people with hearing loss and mental health problems in City of Edinburgh 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	23	288	566	1312	1799	2321	2364	
female	152	202	474	659	1294	2707	4007	City of Edinburgh
all	175	490	1040	1971	3093	5028	6371	

Table 17: Estimate of people with hearing loss and mental health problems in City of Edinburgh 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	20	331	652	1314	1468	3028	3089	
female	132	232	557	641	1535	3289	4586	City of Edinburgh
all	152	563	1209	1955	3003	6317	7675	

Table 18: Estimate of people with hearing loss and mental health problems in City of Edinburgh 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	22	281	745	1495	2184	3789	4404	
female	138	194	637	742	1492	3986	5912	City of Edinburgh
all	160	475	1382	2237	3676	7775	10316	

1.6 Clackmannanshire

There are an estimated 2199 of people with hearing loss and mental health issues in Clackmannanshire today (see table 19). This will rise to 3036 in 2038 (see table 21) if no interventions to address the issue are undertaken. 1788 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 2714 ($\approx$ 89%) in 2038.

Table 19: Estimate of people with hearing loss and mental health problems in Clackmannanshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	19	60	167	249	339	256	
female	9	14	54	86	178	373	393	Clackmannanshire
all	11	33	114	253	427	712	649	

Table 20: Estimate of people with hearing loss and mental health problems in Clackmannanshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	20	49	145	191	431	421	
female	8	15	46	75	203	439	542	Clackmannanshire
all	9	35	95	220	394	870	963	

Table 21: Estimate of people with hearing loss and mental health problems in Clackmannanshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	18	51	121	249	506	590	
female	7	13	47	64	179	514	676	Clackmannanshire
all	8	31	98	185	428	1020	1266	

1.7 Dumfries and Galloway

There are an estimated 7991 of people with hearing loss and mental health issues in Dumfries and Galloway today (see table 22). This will rise to 10189 in 2038 (see table 24) if no interventions to address the issue are undertaken. 6841 ($\approx$ 86%) of these are in the above 61 of age category in 2021 and 9295 ($\approx$ 91%) in 2038.

Table 22: Estimate of people with hearing loss and mental health problems in Dumfries and Galloway 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	47	147	493	843	1284	1140	
female	23	36	140	260	587	1338	1649	Dumfries and Galloway
all	27	83	287	753	1430	2622	2789	

Table 23: Estimate of people with hearing loss and mental health problems in Dumfries and Galloway 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	52	127	385	622	1501	1595	
female	20	39	119	212	667	1477	2060	Dumfries and Galloway
all	24	91	246	597	1289	2978	3655	

Table 24: Estimate of people with hearing loss and mental health problems in Dumfries and Galloway 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	47	142	341	745	1708	2090	
female	20	32	127	182	554	1725	2473	Dumfries and Galloway
all	23	79	269	523	1299	3433	4563	

1.8 Dundee City

There are an estimated 5883 of people with hearing loss and mental health issues in Dundee City today (see table 25). This will rise to 7136 in 2038 (see table 27) if no interventions to address the issue are undertaken. 4857 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 6134 ($\approx$ 86%) in 2038.

Table 25: Estimate of people with hearing loss and mental health problems in Dundee City 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	7	64	137	392	571	810	781	
female	42	47	123	214	415	916	1364	Dundee City
all	49	111	260	606	986	1726	2145	

Table 26: Estimate of people with hearing loss and mental health problems in Dundee City 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	75	146	328	435	930	950	
female	36	54	133	171	491	987	1417	Dundee City
all	42	129	279	499	926	1917	2367	

Table 27: Estimate of people with hearing loss and mental health problems in Dundee City 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	62	171	348	547	1088	1226	
female	37	44	152	182	395	1199	1679	Dundee City
all	43	106	323	530	942	2287	2905	

1.9 East Ayrshire

There are an estimated 5296 of people with hearing loss and mental health issues in East Ayrshire today (see table 28). This will rise to 6848 in 2038 (see table 30) if no interventions to address the issue are undertaken. 4343 ($\approx$ 82%) of these are in the above 61 of age category in 2021 and 6049 ($\approx$ 88%) in 2038.

Table 28: Estimate of people with hearing loss and mental health problems in East Ayrshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	46	135	383	577	822	648	
female	19	35	127	204	413	881	1002	East Ayrshire
all	23	81	262	587	990	1703	1650	

Table 29: Estimate of people with hearing loss and mental health problems in East Ayrshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	51	121	327	445	961	934	
female	19	36	112	176	483	1007	1218	East Ayrshire
all	22	87	233	503	928	1968	2152	

Table 30: Estimate of people with hearing loss and mental health problems in East Ayrshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	43	134	299	571	1141	1224	
female	19	30	114	157	422	1217	1474	East Ayrshire
all	22	73	248	456	993	2358	2698	

1.10 East Dunbartonshire

There are an estimated 5353 of people with hearing loss and mental health issues in East Dunbartonshire today (see table 31). This will rise to 7438 in 2038 (see table 33) if no interventions to address the issue are undertaken. 4514 ($\approx$ 84%) of these are in the above 61 of age category in 2021 and 6645 ($\approx$ 89%) in 2038.

Table 31: Estimate of people with hearing loss and mental health problems in East Dunbartonshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	36	114	343	516	754	802	
female	16	28	111	188	385	870	1187	East Dunbartonshire
all	19	64	225	531	901	1624	1989	

Table 32: Estimate of people with hearing loss and mental health problems in East Dunbartonshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	44	115	279	388	903	1129	
female	15	33	111	157	447	1009	1558	East Dunbartonshire
all	18	77	226	436	835	1912	2687	

Table 33: Estimate of people with hearing loss and mental health problems in East Dunbartonshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	37	137	287	471	1035	1545	
female	16	28	127	158	375	1190	2029	East Dunbartonshire
all	19	65	264	445	846	2225	3574	

1.11 East Lothian

There are an estimated 4663 of people with hearing loss and mental health issues in East Lothian today (see table 34). This will rise to 7044 in 2038 (see table 36) if no interventions to address the issue are undertaken. 3827 ($\approx$ 82%) of these are in the above 61 of age category in 2021 and 6205 ($\approx$ 88%) in 2038.

Table 34: Estimate of people with hearing loss and mental health problems in East Lothian 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	38	120	336	475	690	594	
female	19	31	113	176	355	769	944	East Lothian
all	22	69	233	512	830	1459	1538	

Table 35: Estimate of people with hearing loss and mental health problems in East Lothian 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	46	117	304	402	872	882	
female	17	37	112	166	446	961	1228	East Lothian
all	20	83	229	470	848	1833	2110	

Table 36: Estimate of people with hearing loss and mental health problems in East Lothian 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	41	140	305	548	1115	1238	
female	18	32	132	168	427	1226	1651	East Lothian
all	21	73	272	473	975	2341	2889	

1.12 East Renfrewshire

There are an estimated 4300 of people with hearing loss and mental health issues in East Renfrewshire today (see table 37). This will rise to 6003 in 2038 (see table 39) if no interventions to address the issue are undertaken. 3584 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 5270 ($\approx$ 86%) in 2038.

Table 37: Estimate of people with hearing loss and mental health problems in East Renfrewshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	31	102	284	406	563	588	East Renfrewshire
female	15	26	101	154	309	682	1036	
all	18	57	203	438	715	1245	1624	

Table 38: Estimate of people with hearing loss and mental health problems in East Renfrewshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	39	108	238	305	688	808	
female	15	32	107	134	354	814	1301	East Renfrewshire
all	18	71	215	372	659	1502	2109	

Table 39: Estimate of people with hearing loss and mental health problems in East Renfrewshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	34	128	256	381	791	1124	
female	16	28	125	143	307	959	1708	East Renfrewshire
all	19	62	253	399	688	1750	2832	

1.13 Falkirk

There are an estimated 6638 of people with hearing loss and mental health issues in Falkirk today (see table 40). This will rise to 9432 in 2038 (see table 42) if no interventions to address the issue are undertaken. 5356 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 8248 ($\approx$ 87%) in 2038.

Table 40: Estimate of people with hearing loss and mental health problems in Falkirk 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	5	66	196	505	697	977	823	
female	28	50	176	256	513	1076	1270	Falkirk
all	33	116	372	761	1210	2053	2093	

Table 41: Estimate of people with hearing loss and mental health problems in Falkirk 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	5	74	179	479	585	1187	1190	
female	27	52	161	251	622	1285	1613	Falkirk
all	32	126	340	730	1207	2472	2803	

Table 42: Estimate of people with hearing loss and mental health problems in Falkirk 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	5	70	198	440	830	1525	1605	
female	27	46	168	230	614	1595	2079	Falkirk
all	32	116	366	670	1444	3120	3684	

1.14 Fife

There are an estimated 16390 of people with hearing loss and mental health issues in Fife today (see table 43). This will rise to 22277 in 2038 (see table 45) if no interventions to address the issue are undertaken. 13556 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 19782 ($\approx$ 89%) in 2038.

Table 43: Estimate of people with hearing loss and mental health problems in Fife 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	12	141	408	1130	1723	2523	2070	
female	72	108	371	592	1255	2694	3291	Fife
all	84	249	779	1722	2978	5217	5361	

Table 44: Estimate of people with hearing loss and mental health problems in Fife 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	11	153	368	999	1338	2978	3114	
female	65	113	346	531	1451	3164	4215	Fife
all	76	266	714	1530	2789	6142	7329	

Table 45: Estimate of people with hearing loss and mental health problems in Fife 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	11	137	402	916	1774	3551	4098	
female	66	96	366	501	1313	3738	5308	Fife
all	77	233	768	1417	3087	7289	9406	

1.15 Glasgow City

There are an estimated 20059 of people with hearing loss and mental health issues in Glasgow City today (see table 46). This will rise to 25971 in 2038 (see table 48) if no interventions to address the issue are undertaken. 15557 ($\approx$ 78%) of these are in the above 61 of age category in 2021 and 21245 ($\approx$ 82%) in 2038.

Table 46: Estimate of people with hearing loss and mental health problems in Glasgow City 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	29	346	646	1611	2083	2487	2135	
female	182	233	572	883	1505	2993	4354	Glasgow City
all	211	579	1218	2494	3588	5480	6489	

Table 47: Estimate of people with hearing loss and mental health problems in Glasgow City 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	24	395	724	1468	1739	3112	2419	
female	156	270	615	780	1987	3431	4115	Glasgow City
all	180	665	1339	2248	3726	6543	6534	

Table 48: Estimate of people with hearing loss and mental health problems in Glasgow City 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	25	322	825	1626	2363	4059	3342	
female	163	225	706	834	1761	4658	5062	Glasgow City
all	188	547	1531	2460	4124	8717	8404	

1.16 Highland

There are an estimated 11163 of people with hearing loss and mental health issues in the Highlands today (see table 49). This will rise to 15596 in 2038 (see table 51) if no interventions to address the issue are undertaken. 9318 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 13978 ($\approx$ 90%) in 2038.

Table 49: Estimate of people with hearing loss and mental health problems in Highland 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	7	90	248	764	1244	1701	1459	
female	36	66	237	397	865	1816	2233	Highland
all	43	156	485	1161	2109	3517	3692	

Table 50: Estimate of people with hearing loss and mental health problems in Highland 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	96	242	638	927	2111	2201	
female	33	67	221	351	976	2184	3004	Highland
all	39	163	463	989	1903	4295	5205	

Table 51: Estimate of people with hearing loss and mental health problems in Highland 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	87	259	623	1168	2422	3061	
female	33	58	224	328	868	2519	3940	Highland
all	39	145	483	951	2036	4941	7001	

1.17 Inverclyde

There are an estimated 3648 of people with hearing loss and mental health issues in Inverclyde today (see table 52). This will rise to 4518 in 2038 (see table 54) if no interventions to address the issue are undertaken. 3014 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 4049 ($\approx$ 90%) in 2038.

Table 52: Estimate of people with hearing loss and mental health problems in Inverclyde 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	29	79	266	369	513	434	
female	14	22	81	141	277	591	830	Inverclyde
all	16	51	160	407	646	1104	1264	

Table 53: Estimate of people with hearing loss and mental health problems in Inverclyde 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	29	73	188	298	591	596	
female	12	22	68	113	331	667	923	Inverclyde
all	14	51	141	301	629	1258	1519	

Table 54: Estimate of people with hearing loss and mental health problems in Inverclyde 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	25	73	175	314	741	776	
female	11	18	69	96	265	818	1135	Inverclyde
all	13	43	142	271	579	1559	1911	

1.18 Midlothian

There are an estimated 3690 of people with hearing loss and mental health issues in Midlothian today (see table 55). This will rise to 5512 in 2038 (see table 57) if no interventions to address the issue are undertaken. 3002 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 4703 ($\approx$ 85%) in 2038.

Table 55: Estimate of people with hearing loss and mental health problems in Midlothian 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	37	99	266	403	557	444	
female	16	30	94	143	294	616	688	Midlothian
all	19	67	193	409	697	1173	1132	

Table 56: Estimate of people with hearing loss and mental health problems in Midlothian 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	45	112	252	319	691	694	
female	16	37	108	140	352	751	912	Midlothian
all	19	82	220	392	671	1442	1606	

Table 57: Estimate of people with hearing loss and mental health problems in Midlothian 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	40	134	287	457	843	969	
female	18	32	132	163	349	916	1169	Midlothian
all	21	72	266	450	806	1759	2138	

1.19 Moray

There are an estimated 4450 of people with hearing loss and mental health issues in Moray today (see table 58). This will rise to 6414 in 2038 (see table 60) if no interventions to address the issue are undertaken. 3701 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 5691 ($\approx$ 89%) in 2038.

Table 58: Estimate of people with hearing loss and mental health problems in Moray 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	38	113	302	459	671	596	
female	16	27	98	152	330	731	914	Moray
all	19	65	211	454	789	1402	1510	

Table 59: Estimate of people with hearing loss and mental health problems in Moray 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	44	108	294	371	815	895	
female	14	30	92	143	381	857	1195	Moray
all	17	74	200	437	752	1672	2090	

Table 60: Estimate of people with hearing loss and mental health problems in Moray 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	37	122	284	537	1009	1221	
female	14	26	101	136	363	1017	1544	Moray
all	17	63	223	420	900	2026	2765	

1.20 Na h-Eileanan Siar

There are an estimated 1440 of people with hearing loss and mental health issues in Na h-Eileanan Siar today (see table 61). This will rise to 1715 in 2038 (see table 63) if no interventions to address the issue are undertaken. 1230 ($\approx$ 85%) of these are in the above 61 of age category in 2021 and 1556 ($\approx$ 91%) in 2038.

Table 61: Estimate of people with hearing loss and mental health problems in Na h-Eileanan Siar 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	9	31	89	154	223	180	
female	4	7	26	43	103	235	335	Na h-Eileanan Siar
all	5	16	57	132	257	458	515	

Table 62: Estimate of people with hearing loss and mental health problems in Na h-Eileanan Siar 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	9	26	75	105	250	262	
female	3	7	23	37	103	256	399	Na h-Eileanan Siar
all	4	16	49	112	208	506	661	

Table 63: Estimate of people with hearing loss and mental health problems in Na h-Eileanan Siar 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	8	25	62	132	263	329	
female	3	6	22	32	89	260	483	Na h-Eileanan Siar
all	4	14	47	94	221	523	812	

1.21 North Ayrshire

There are an estimated 6373 of people with hearing loss and mental health issues in North Ayrshire today (see table 64). This will rise to 8232 in 2038 (see table 66) if no interventions to address the issue are undertaken. 5331 ($\approx$ 84%) of these are in the above 61 of age category in 2021 and 7448 ($\approx$ 90%) in 2038.

Table 64: Estimate of people with hearing loss and mental health problems in North Ayrshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	44	137	423	675	983	788	
female	24	36	139	235	505	1108	1272	North Ayrshire
all	28	80	276	658	1180	2091	2060	

Table 65: Estimate of people with hearing loss and mental health problems in North Ayrshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	47	111	343	504	1125	1167	
female	20	37	113	202	583	1258	1629	North Ayrshire
all	23	84	224	545	1087	2383	2796	

Table 66: Estimate of people with hearing loss and mental health problems in North Ayrshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	40	120	287	619	1296	1520	
female	20	31	118	165	504	1494	2015	North Ayrshire
all	23	71	238	452	1123	2790	3535	

1.22 North Lanarkshire

There are an estimated 12917 of people with hearing loss and mental health issues in North Lanarkshire today (see table 67). This will rise to 17568 in 2038 (see table 69) if no interventions to address the issue are undertaken. 10244 ($\approx$ 79%) of these are in the above 61 of age category in 2021 and 15209 ($\approx$ 87%) in 2038.

Table 67: Estimate of people with hearing loss and mental health problems in North Lanarkshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	11	142	392	1042	1407	1854	1391	
female	64	109	362	551	1058	2158	2376	North Lanarkshire
all	75	251	754	1593	2465	4012	3767	

Table 68: Estimate of people with hearing loss and mental health problems in North Lanarkshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	10	147	361	935	1154	2262	2014	
female	59	107	339	507	1299	2558	2818	North Lanarkshire
all	69	254	700	1442	2453	4820	4832	

Table 69: Estimate of people with hearing loss and mental health problems in North Lanarkshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	10	130	378	874	1557	2876	2750	
female	58	94	336	479	1201	3235	3590	North Lanarkshire
all	68	224	714	1353	2758	6111	6340	

1.23 Orkney Islands

There are an estimated 1102 of people with hearing loss and mental health issues in Orkney Islands today (see table 70). This will rise to 1508 in 2038 (see table 72) if no interventions to address the issue are undertaken. 926 ($\approx$ 84%) of these are in the above 61 of age category in 2021 and 1364 ($\approx$ 90%) in 2038.

Table 70: Estimate of people with hearing loss and mental health problems in Orkney Islands 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	8	23	78	119	186	151	
female	3	6	21	36	81	183	206	Orkney Islands
all	4	14	44	114	200	369	357	

Table 71: Estimate of people with hearing loss and mental health problems in Orkney Islands 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	8	21	62	95	208	260	
female	3	6	19	32	89	205	283	Orkney Islands
all	4	14	40	94	184	413	543	

Table 72: Estimate of people with hearing loss and mental health problems in Orkney Islands 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	7	22	57	114	253	337	
female	3	5	20	29	79	229	352	Orkney Islands
all	4	12	42	86	193	482	689	

1.24 Perth and Kinross

There are an estimated 7620 of people with hearing loss and mental health issues in Perth and Kinross today (see table 73). This will rise to 10842 in 2038 (see table 75) if no interventions to address the issue are undertaken. 6449 ($\approx$ 85%) of these are in the above 61 of age category in 2021 and 9737 ($\approx$ 90%) in 2038.

Table 73: Estimate of people with hearing loss and mental health problems in Perth and Kinross 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	58	159	487	770	1146	1102	
female	24	42	149	248	547	1224	1660	Perth and Kinross
all	28	100	308	735	1317	2370	2762	

Table 74: Estimate of people with hearing loss and mental health problems in Perth and Kinross 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	64	164	424	608	1407	1632	
female	22	44	143	226	634	1414	2159	Perth and Kinross
all	26	108	307	650	1242	2821	3791	

Table 75: Estimate of people with hearing loss and mental health problems in Perth and Kinross 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	57	179	435	794	1686	2265	
female	22	38	153	217	580	1671	2741	Perth and Kinross
all	26	95	332	652	1374	3357	5006	

1.25 Renfrewshire

There are an estimated 7469 of people with hearing loss and mental health issues in Renfrewshire today (see table 76). This will rise to 9918 in 2038 (see table 78) if no interventions to address the issue are undertaken. 6068 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 8658 ($\approx$ 87%) in 2038.

Table 76: Estimate of people with hearing loss and mental health problems in Renfrewshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	73	188	563	761	1074	914	
female	34	54	183	300	570	1208	1541	Renfrewshire
all	40	127	371	863	1331	2282	2455	

Table 77: Estimate of people with hearing loss and mental health problems in Renfrewshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	5	83	188	456	636	1272	1264	
female	30	59	171	255	709	1401	1756	Renfrewshire
all	35	142	359	711	1345	2673	3020	

Table 78: Estimate of people with hearing loss and mental health problems in Renfrewshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	5	70	215	461	773	1634	1672	
female	30	50	188	241	604	1787	2188	Renfrewshire
all	35	120	403	702	1377	3421	3860	

1.26 Scottish Borders

There are an estimated 5917 of people with hearing loss and mental health issues in the Scottish Borders today (see table 79). This will rise to 7951 in 2038 (see table 81) if no interventions to address the issue are undertaken. 5001 ($\approx$ 85%) of these are in the above 61 of age category in 2021 and 7205 ($\approx$ 91%) in 2038.

Table 79: Estimate of people with hearing loss and mental health problems in Scottish Borders 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	35	124	390	645	957	773	
female	17	28	117	202	446	1003	1177	Scottish Borders
all	20	63	241	592	1091	1960	1950	

Table 80: Estimate of people with hearing loss and mental health problems in Scottish Borders 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	39	104	328	497	1159	1147	
female	15	30	101	178	517	1150	1511	Scottish Borders
all	18	69	205	506	1014	2309	2658	

Table 81: Estimate of people with hearing loss and mental health problems in Scottish Borders 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	35	116	284	633	1368	1530	
female	15	26	109	158	462	1358	1854	Scottish Borders
all	18	61	225	442	1095	2726	3384	

1.27 Shetland Islands

There are an estimated 995 of people with hearing loss and mental health issues in the Shetland Islands today (see table 82). This will rise to 1357 in 2038 (see table 84) if no interventions to address the issue are undertaken. 813 ($\approx$ 82%) of these are in the above 61 of age category in 2021 and 1197 ($\approx$ 88%) in 2038.

Table 82: Estimate of people with hearing loss and mental health problems in Shetland Islands 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	10	27	76	115	161	120	
female	4	6	23	35	76	156	185	Shetland Islands
all	5	16	50	111	191	317	305	

Table 83: Estimate of people with hearing loss and mental health problems in Shetland Islands 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	10	25	67	87	190	193	
female	3	7	20	32	81	188	250	Shetland Islands
all	4	17	45	99	168	378	443	

Table 84: Estimate of people with hearing loss and mental health problems in Shetland Islands 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	1	9	27	64	115	219	253	
female	3	6	21	29	75	206	329	Shetland Islands
all	4	15	48	93	190	425	582	

1.28 South Ayrshire

There are an estimated 5969 of people with hearing loss and mental health issues in South Ayrshire today (see table 85). This will rise to 7839 in 2038 (see table 87) if no interventions to address the issue are undertaken. 5110 ($\approx$ 86%) of these are in the above 61 of age category in 2021 and 7178 ($\approx$ 92%) in 2038.

Table 85: Estimate of people with hearing loss and mental health problems in South Ayrshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	36	112	355	606	927	829	
female	18	29	110	196	446	1019	1283	South Ayrshire
all	21	65	222	551	1052	1946	2112	

Table 86: Estimate of people with hearing loss and mental health problems in South Ayrshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	38	96	282	447	1100	1212	
female	16	28	88	136	657	1171	1603	South Ayrshire
all	19	66	184	418	1104	2271	2815	

Table 87: Estimate of people with hearing loss and mental health problems in South Ayrshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	33	102	245	538	1243	1615	
female	15	24	94	145	433	1366	1983	South Ayrshire
all	18	57	196	390	971	2609	3598	

1.29 South Lanarkshire

There are an estimated 13608 of people with hearing loss and mental health issues in South Lanarkshire today (see table 88). This will rise to 18745 in 2038 (see table 90) if no interventions to address the issue are undertaken. 11070 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 16488 ($\approx$ 88%) in 2038.

Table 88: Estimate of people with hearing loss and mental health problems in South Lanarkshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	9	126	367	1010	1464	1951	1616	
female	56	98	333	539	1079	2201	2759	South Lanarkshire
all	65	224	700	1549	2543	4152	4375	

Table 89: Estimate of people with hearing loss and mental health problems in South Lanarkshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	9	137	336	895	1170	2466	2319	
female	50	101	317	476	1291	2662	3254	South Lanarkshire
all	59	238	653	1371	2461	5128	5573	

Table 90: Estimate of people with hearing loss and mental health problems in South Lanarkshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	9	120	368	832	1552	3035	3266	
female	51	87	333	457	1147	3273	4215	South Lanarkshire
all	60	207	701	1289	2699	6308	7481	

1.30 Stirling

There are an estimated 3934 of people with hearing loss and mental health issues in Stirling today (see table 91). This will rise to 5463 in 2038 (see table 93) if no interventions to address the issue are undertaken. 3253 ($\approx$ 83%) of these are in the above 61 of age category in 2021 and 4778 ($\approx$ 87%) in 2038.

Table 91: Estimate of people with hearing loss and mental health problems in Stirling 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	4	33	84	284	409	581	509	
female	23	26	79	148	286	653	815	Stirling
all	27	59	163	432	695	1234	1324	

Table 92: Estimate of people with hearing loss and mental health problems in Stirling 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	40	96	253	335	685	720	
female	20	32	91	141	357	707	1040	Stirling
all	23	72	187	394	692	1392	1760	

Table 93: Estimate of people with hearing loss and mental health problems in Stirling 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	35	113	243	449	864	961	
female	21	27	109	134	341	907	1256	Stirling
all	24	62	222	377	790	1771	2217	

1.31 West Dunbartonshire

There are an estimated 3672 of people with hearing loss and mental health issues in West Dunbartonshire today (see table 94). This will rise to 4732 in 2038 (see table 96) if no interventions to address the issue are undertaken. 2963 ($\approx$ 81%) of these are in the above 61 of age category in 2021 and 4150 ($\approx$ 88%) in 2038.

Table 94: Estimate of people with hearing loss and mental health problems in West Dunbartonshire 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	35	91	288	403	505	402	
female	17	27	91	157	305	595	753	West Dunbartonshire
all	20	62	182	445	708	1100	1155	

Table 95: Estimate of people with hearing loss and mental health problems in West Dunbartonshire 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	2	38	86	222	323	629	535	
female	15	29	82	127	366	719	826	West Dunbartonshire
all	17	67	168	349	689	1348	1361	

Table 96: Estimate of people with hearing loss and mental health problems in West Dunbartonshire 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	3	31	93	214	374	786	731	
female	16	24	86	115	297	893	1069	West Dunbartonshire
all	19	55	179	329	671	1679	1800	

1.32 West Lothian

There are an estimated 6669 of people with hearing loss and mental health issues in West Lothian today (see table 97). This will rise to 10131 in 2038 (see table 99) if no interventions to address the issue are undertaken. 5226 ($\approx$ 78%) of these are in the above 61 of age category in 2021 and 8723 ($\approx$ 86%) in 2038.

Table 97: Estimate of people with hearing loss and mental health problems in West Lothian 2021

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	79	222	557	725	1004	745	
female	33	60	199	287	532	1092	1128	West Lothian
all	39	139	421	844	1257	2096	1873	

Table 98: Estimate of people with hearing loss and mental health problems in West Lothian 2028

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	89	211	528	632	1238	1239	
female	32	65	193	275	673	1314	1625	West Lothian
all	38	154	404	803	1305	2552	2864	

Table 99: Estimate of people with hearing loss and mental health problems in West Lothian 2038

Gender	Age							Council
	18-30	31-40	41-50	51-60	61-70	71-80	81 plus	
male	6	82	240	510	892	1655	1722	
female	32	58	210	270	644	1696	2114	West Lothian
all	38	140	450	780	1536	3351	3836	

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